

Page 7, line 15:

Please replace paragraph 11 on page 7, line 15, which begins "Figure 19 depicts ...", with the following amended paragraph:

Figure 17 depicts a coded carrier.

Page 7, line 16:

Please replace paragraph 12 on page 7, line 16, which begins "Figure 20 depicts ...", with the following amended paragraph:

A1 Figure 18 depicts a holder array adapted to support one or more self-orienting carriers.

Page 22, line 18:

Please replace paragraph 2 on page 22, line 18 to page 23, line 26, which begins "A particularly preferred embodiment...", with the following amended paragraph:

A2 A particularly preferred embodiment provides for end viewable codes within the carrier so that a code may be determined by viewing either the top or bottom surface of, for example, a cylinder shaped carrier. In this particularly preferred embodiment, the code comprises concentric rings co-axially positioned around the central, cylindrical axis of the cylinder carrier. Figure 17 depicts a perspective view carrier 190 comprised of fused bundle 192 of fibers 194, where at least two of the fibers comprise optical, spatial coding compartments, where each of the fibers are aligned in a parallel fashion, parallel to axis 198 of the cylinder formed by the fused bundle. In the shown embodiment, as disclosed by Chee, is used to retain spherical particles that are encoded as a whole either colorimetrically or chemically, including DNA.

Page 24, line 24:

Please replace paragraph 2 on page 24, line 24 to page 25, line 12, which begins
“The present invention ...”, with the following amended paragraph:

AB
The present invention further provides for a detection system where in one embodiment, comprises the optical fibers of Chee in optical communication with a detector of the present invention adapted to detect both activity on the surface of a carrier, and detect the code within the carrier. In another embodiment, holder array 2000, as shown in Figure 18, having a plurality of holders 2002 adapted to hold a self-orienting shaped carrier 2004 is detachable from the fiber optics in optical communication with the detector so that the multiple holders may be used with one fiber optic-detector device. In yet another embodiment, carriers 2004 having compounds or materials attached thereto are manufactured and distributed pre-installed in a holder device that may later be combined with the fiber optic-detector described above. In yet another embodiment, the pre-installed carrier holders are pre-characterized with respect to positional relation between compound and position of each carrier within the holder array so that an end user is relieved of having to decode each carrier, and only needs to measure activity associated with each carrier and use a database associated with each holder array, provided by the manufacture, to determine each carrier's code and identity.

In the Drawings

Please renumber Figures 19 and 20 as Figures 17 and 18, respectively.